

Division of Air and Water Quality - Air Permits Program

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<http://www.state.ak.us/dec/home.htm>

October 3, 2000

Mr. Michael Clutter
Icicle Seafoods
4019 - 21st Avenue West
Seattle, WA 98199

Re: Letter of Approval for Revision of Owner-requested Limit ORL000339, Icicle Seafoods,
P/V Arctic Star

Dear Mr. Clutter:

On February 14, 2000, the Department received an application for proposed revision to your owner-requested limit (ORL) for P/V Arctic Star. In accordance with 18 AAC 50.225(h), the Department approves your request. The enclosed ORL constitutes your letter of approval under 18 AAC 50.225(f).

To activate this ORL, you must accept its conditions by signing and notarizing the first page. Return that page to the Department and the limit will take effect one day after we receive it.

Although this ORL allows you to avoid obtaining a permit, you must still comply with the applicable emissions standards contained in 18 AAC 50.

You may revise or terminate the ORL in accordance with 18 AAC 50.225(h). This ORL remains in effect until it is revised or revoked.

I look forward to receiving your signed and notarized first page. Please call me if you have any questions.

Sincerely,

John F. Kuterbach
Acting Manager

JFK/DEB/pal (g:\awq\awq-permits\airfacs\icicle arctic star\orl\orl339mod1.doc)

Enclosure

Clean Air, Clean Water

Icicle Seafoods, P/V Arctic Star

ORL ORL000339

cc: ADEC/Air Permits, Juneau, Anchorage, Fairbanks
U.S. EPA, Region 10, MS OAQ-108, Seattle

State of Alaska
Department of Environmental Conservation - Air Permit Program

FACILITY IDENTIFICATION

Pre-approved Limit No.: ORL000339

Owner/Operator: Icicle Seafoods
Facility Name: P/V Arctic Star
Facility Address: 4019 - 21st Avenue West
City, State, Zip: Seattle, WA 98199

UTM Coordinates:

Facility Contact
Phone Number:

In accordance with 18 AAC 50.225(f), I understand and agree to the terms and conditions of this approval.

Owner or Operator

Printed Name

Title:

This certifies that on _____, the person named above appeared before me, a notary public in _____ and for the State of _____, and signed the above statement in my presence.

Notary Signature & Seal: _____

My commission expires: _____

Alaska Department of Environmental Conservation approval:

Air Permit Program Issuing Officer

ORL Effective Date

TERMS AND CONDITIONS

- 1) To ensure compliance with ambient air quality standards and increments, the owner or operator must limit sulfur dioxide emissions from the facility while operating in St. Paul Harbor, St. Paul, Pribilof Islands, Alaska as follows:
 - a) Install and operate fuel flow meters to measure the fuel supplied to diesel engines and to boilers while in St. Paul. Obtain a copy of the manufacturer's certification of accuracy for all the unit fuel meters upon installation, and shall maintain a copy readily available at the facility. Calibrate and certify existing fuel meters are accurate to within plus or minus five percent by a method of calibration acceptable to the Department no later than six months after the date of issuance of this permit.
 - b) Determine and record the sulfur content of fuel at the facility by one of the following two methods:
 - i) Method 1: Before loading fuel, measure and record the amount of fuel remaining in the tank (V_T). Record the date, quantity (V_S), and sulfur content in weight percent (S_S) of the fuel delivery. You may use any method approved by the American Society for Testing and Materials (ASTM) for determining the sulfur content of fuel, or rely on the supplier's analysis done in accordance with ASTM methods. Calculate the resulting sulfur content by the following equation:

$$Wt \% S = \frac{[(S_S \times V_S) + (S_T \times V_T)]}{(V_S + V_T)}$$

where,

Wt % S = the resulting average sulfur content of the fuel

V_T = Gallons of fuel in tank before delivery

S_S = Sulfur content of the fuel delivery.

V_S = Gallons of fuel delivered.

S_T = Sulfur content of fuel in tank before delivery.

- ii) Method 2: After receiving a shipment of fuel, measure the sulfur content of the fuel in the tank using any method approved by the American Society for Testing and Materials (ASTM) for determining the sulfur content of fuel.
- c) If the fuel contains more than 0.34 percent sulfur by weight while operating in St. Paul, limit the amount of fuel burned in any three hours to the following:

$$Diesel\ Engines = \frac{125}{wt.\% S} \text{ gallons}$$

$$\text{Boilers} = \frac{89}{\text{wt.\% S}} \text{ gallons}$$

When operating in St. Paul, record the readings of the fuel flow meters for each source every three hours. Record total fuel used in diesel engines and the total fuel used in boilers. Compare these totals to the limit calculated above. If any total exceeds the applicable limit, report this exceedance as an excess emission and act to prevent continuing or recurring exceedances in St. Paul.

- d) If the fuel contains more than 0.24 percent sulfur by weight while operating in St. Paul, limit the amount of fuel burned in any 24 hours to the following:

$$\text{Diesel Engines} = \frac{531}{\text{wt.\% S}} \text{ gallons}$$

$$\text{Boilers} = \frac{253}{\text{wt.\% S}} \text{ gallons}$$

While operating in St. Paul, record the readings of the fuel flow meters for each source at approximately the same time each calendar day. Calculate and record total fuel used in diesel engines and the total fuel used in boilers. Compare these totals to the limit calculated above. If any total exceeds the applicable limit, report this exceedance as an excess emission and take action to prevent continuing or recurring exceedances in St. Paul.

- 2) Before commencing fish processing in the St. Paul area, the owner or operator must erect stacks on the Arctic Star as follows:
- a) The diesel-electric generator stack shall be oriented vertically and have an exit elevation at least 34 feet above the vessel helicopter deck;
 - b) The boiler stack shall be oriented vertically and have an exit elevation at least 7 feet above the vessel helicopter deck; and
 - c) No stack shall use a weather cap that impedes the vertical flow of exhaust gases.
- 3) While operating in St. Paul, to ensure that the facility's emissions remain below the thresholds for an operating permit, the owner or operator must limit annual fuel consumption in generators to no more than 300,000 gallons per year, and in boilers to no more than 135,000 gallons per year.
- 4) No later than the 5th day of each calendar month following a month that included operations in St. Paul, the owner or operator shall:
- a) Calculate and record the total fuel used by generators in St. Paul and the total amount used by

boilers in St. Paul for the previous month;

- b) Determine the amount of fuel that may be used by generators in St. Paul during the current month by subtracting the amount of fuel used by generators in St. Paul during the preceding eleven months from 300,000 gallons. Calculate the amount of fuel that may be used in boilers in St. Paul during the current month by subtracting the amount of fuel used by boilers in St. Paul during the preceding eleven months from 135,000 gallons.
 - c) Calculate the total amount of fuel used by generators in St. Paul and the total amount used by boilers in St. Paul during the preceding twelve months. If the total amount used by generators in St. Paul exceeds 300,000 gallons, report this exceedance as an excess emission and take action to prevent continuing or recurring exceedances in St. Paul. If the total amount used by boilers in St. Paul exceeds 135,000 gallons, report this exceedance as an excess emission and take action to prevent continuing or recurring exceedances in St. Paul.
- 5) The owner or operator shall keep all records required by this owner-requested limit for five years from the date of collection.
 - 6) The owner or operator shall report any excess emission under this owner-requested limit no later than seven days after discovering the exceedance. To report the excess emission, the owner or operator must FAX a completed and signed Excess Emission Notification Form to the Department at (907) 269-7508.
 - 7) To avoid classification under 18 AAC 50.300, the owner or operator shall only use source 6 for incineration while located in St. Paul Harbor. Source 6 has a rated capacity of 200 pounds per hour.
 - 8) The owners shall maintain a log showing the number of days the Arctic Star operates and the location of the vessel at the time she is in operation. This information shall be reported to the Department annually no later than 31 January of each year. (The purpose of this reporting requirement is to ensure that diesel-electric generating equipment onboard the Arctic Star maintains its non-road engine status by not remaining in any one location longer than 12 consecutive months.)
 - 9) Conditions 1, 3, and 4 apply to the Arctic Star to protect ambient air quality standards and increments when she is operating in St. Paul. At all other times and locations the fuel burning equipment on the Arctic Star is only subject to the opacity, particulate matter, and sulfur oxide requirements of 18 AAC 50.055(a)(b) and (c).
 - 10) Reporting Requirements: No later than January 31 of each year submit to the department a copy of the records required to be kept and calculations required to be performed during the previous calendar year in Conditions 1, 3, 4 and 8 above. Submit reports to ADEC Air Permits 610 University Avenue, Fairbanks, Alaska 99709.

EQUIPMENT COVERED BY ORL

Number	Description
1	Caterpillar D-399 generator 850kW generating capacity
2	Caterpillar D-399 generator 850kW generating capacity
3	Caterpillar D-3406 generator 250kW generating capacity
4	Upper Continental boiler 7.3 MMBTU/hr input
5	Lower Continental boiler 6.2 MMBTU/hr input
6	Smart Ash incinerator (200 lb/hr rated capacity)

AVOIDED PERMITS

This ORL allows Icicle Seafoods to avoid:

The requirement to obtain an operating permit under AS 46.14.130(b)(1) and AS 46.14.130(b)(4)(B).

The Department's analysis explaining how this ORL allows the Icicle Seafoods to avoid the above requirements is on file at the Department's Anchorage office.

ADEC Notification Form Fax this form to: (907) 269-7508 Telephone: (907) 269-8888**ICICLE SEAFOODS FISH PROCESSING VESSEL ARCTIC STAR**

Company Name

Facility Name

1. Reason for notification:☐ **Excess Emission**☐ **Permit Condition Exceedence****2. Event Information (Use 24-hour clock):**

	START Time:	END Time:	Duration (hr:min):
Date: _____	_____ : _____	_____ : _____	_____ : _____
Date: _____	_____ : _____	_____ : _____	_____ : _____
	Total:	_____ : _____	

3. Cause of Event (Check all that apply):

<input type="checkbox"/> START UP	<input type="checkbox"/> UPSET CONDITION	<input type="checkbox"/> CONTROL EQUIPMENT
<input type="checkbox"/> SHUT DOWN	<input type="checkbox"/> SCHEDULED MAINTENANCE	<input type="checkbox"/> OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

4. Sources Involved:

Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

5. Emission Limit and/or Permit Condition Exceeded:

Identify each Emission Standard and Permit Condition exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.

Permit Condition	Limit	Exceedence
_____	_____	_____
_____	_____	_____

6. Emission Reduction:

Attach a detailed description of ALL of the measures taken to minimize and/or control emissions during the event.

7. Corrective Actions:

Attach a detailed description of ALL corrective actions taken to restore the system to normal operation.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name:

Signature

Date: